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**COMMENTS OF CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE AND
SIERRA CLUB ON LOAD SERVING ENTITIES' INTEGRATED RESOURCE PLANS**

Deborah Behles
Email: deborah.behles@gmail.com
Of Counsel
California Environmental Justice Alliance
(415) 841-3304

Shana Lazerow
Email: slazerow@cbecal.org
Legal Director
Communities for a Better Environment
120 Broadway, Suite 2
Richmond, CA 94804
(510) 302-0430

*Representing California Environmental
Justice Alliance (CEJA)*

October 23, 2020

Katherine Ramsey
Email: katherine.ramsey@sierraclub.org
Staff Attorney
Sierra Club
2101 Webster Street, Suite 1300
Oakland, CA 94612
(415) 977-5627

Representing Sierra Club

COMMENTS OF CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE AND SIERRA CLUB ON LOAD SERVING ENTITIES' INTEGRATED RESOURCE PLANS

The California Environmental Justice Alliance (“CEJA”) and the Sierra Club respectfully file these comments in response to the narrative descriptions of the September 1, 2020 Integrated Resource Plans filed by the load serving entities. These comments are timely filed pursuant to the October 9, 2020 ruling by Administrative Law Judge Julie Fitch.

INTRODUCTION AND SUMMARY

The passage of Senate Bill (“SB”) 100 and the signing of Executive Order B-55-18 solidified California’s commitment to a future with significant reductions in greenhouse gases (“GHG”) and air pollution through increased usage of renewable energy and energy efficiency. These policies require California to achieve carbon neutrality and transform the energy sector to rely on only renewable and GHG-free energy by 2045. Under SB 350, the California Public Utilities Commission (“Commission”) must develop a process by which each Load Serving Entity (“LSE”) prepares an integrated resource plan (“IRP”) that achieves this future. To meet these legal requirements, the IRPs must demonstrate a comprehensive vision and approach that minimizes impacts on disadvantaged communities (“DACs”) from air pollution and ensures that the electric sector meets the State’s GHG requirements.

We have two primary concerns with the IRPs’ narrative discussions. First, based on our limited, initial review,¹ many plans fail to meet SB 350’s and the Commission’s requirements to: minimize air quality (“AQ”) emissions with a priority for DACs; identify clear, measurable ways that DACs and AQ are considered in procurement; and describe outreach to DACs for long-term contracts. We request that the Commission require the amendment of deficient plans to include: specific actions LSEs intend to take to minimize electric sector emissions; quantifiable metrics to ensure consideration of the AQ and DACs in procurement; and a description of the community outreach that will be undertaken for long-term contracting.

Second, there is almost no LSE support for the Commission relying on the 46 MMT GHG portfolio. In fact, many LSEs describe how only the 38 MMT portfolio is consistent with their policies and that they will follow the 38 MMT plan regardless of whether the Commission chooses a higher GHG target. Given the overwhelming support for the 38 MMT portfolio along

¹ Due to the page limit and the two-week deadline, CEJA and Sierra Club do not include an analysis of all IRPs. We prioritized the largest LSEs to illustrate the identified issues.

with our previous analysis that of the two IRP portfolios, only the 38 MMT portfolio will meet the State's air quality and GHG requirements,² we request that the Commission prioritize the analysis of and procurement for the 38 MMT portfolio. We further request that the aggregation analysis consider the social cost of carbon and individual LSE requirements and policies requiring greater GHG reductions. In the longer term, we also request that the Commission choose the 38 MMT portfolio this IRP cycle and set a lower MMT target next cycle to ensure the necessary electrical sector transformation to meet GHG and AQ requirements.

Importantly, CEJA and Sierra Club believe that the Commission can still ensure that this IRP cycle keeps us on track for meeting GHG and AQ requirements by prioritizing the 38 MMT plans and requiring LSEs to amend plans to include all elements of DAC and AQ requirements.

COMMENTS AND DISCUSSION

We initially provide background related to the DAC and AQ requirements and then present an analysis of whether a subset of individual LSE plans meet these requirements. Next, we provide general overarching comments related to GHG requirements, demand-side management resources, and the evaluation of the location of procurement.

I. COMPLIANCE WITH DAC/AQ REQUIREMENTS

SB 350 and D.18-02-018 set forth requirements for LSEs to consider air quality and impacts to disadvantaged communities when planning for and procuring resources. These requirements are critical to ensuring that our air quality does not become worse as the State increases its renewable energy penetration. Many LSEs, however, fail to include outreach to DACs or an evaluation of ways to minimize emissions when procuring energy. Not only does this fall short of SB 350 and the Commission's requirements, but it also could result in worst air quality for the communities breathing the worst air in the country. Thus, we request that the Commission withhold approval and certification of any IRP that has not met these requirements and mandate filing amended IRPs to describe compliance with these requirements.

A. Overview of Air Quality Concerns Related to Electrical Generation

Air pollution can cause many serious health effects, including respiratory and cardiovascular effects,³ and underserved communities are breathing some of the most polluted

² See e.g., R.16-02-007, CEJA/SC Opening Comments on PD, pp. 2-5 (Mar. 12, 2020).

³ See, generally, California Air Resources Board, Health page, available at <https://ww2.arb.ca.gov/our-work/topics/health> (last visited Oct. 23, 2020).

air in California and the country. These communities are bearing the severe health, social, and economic costs associated with that pollution. The 2020 State of the Air Report by the American Lung Association found that California has the six most polluted cities in the country for ozone, the five most polluted cities in the country for year-round particle pollution, and five of the top seven most polluted cities for short-term particle pollution.⁴ No other state has as many of the most polluted cities.

Concerns about air pollution have heightened recently as many studies show that communities breathing highly polluted air bear a higher risk of dying from COVID-19. In particular, a study by Harvard University's School of Public Health found that a small increase in long-term exposure to particulate matter was associated with a 15 percent increase in the COVID-19 death rate.⁵ Another analysis found that nearly 80% of the deaths in Italy, Spain, France, and Germany occurred in the five most polluted regions based on nitrogen dioxide concentrations.⁶ The initial wave of scientific literature points to the urgency and necessity of the state's next actions: air pollution must be reduced to protect and save lives in the most vulnerable communities.⁷ As researchers observed: "our findings underscore the need to hold governments accountable for the installation of environmental protections that will permanently maintain safe levels of air pollution to protect public human health, rather than removing those environmental protections at the behest of the industries that pollute our environment."⁸

As California brings more renewable energy onto the grid, natural gas units increasingly ramp down or turn off in the middle of the day, then ramp back up or turn back on to meet evening electricity needs. Cycling natural gas plants by starting, stopping, and operating at partial load produces significantly more air pollution than facilities operating as baseload facilities.⁹ For example, the Colusa Generation Station is permitted to emit as much NOx in one

⁴ <https://www.stateoftheair.org/city-rankings/most-polluted-cities.html>

⁵ See X. Wu et al, Air pollution and COVID-19 mortality in the United States: Strengths and limitations of an ecological regression analysis, *Science Advances* (2020), available at <https://projects.iq.harvard.edu/covid-pm>.

⁶ <https://www.sciencedirect.com/science/article/pii/S0048969720321215>

⁷ See <https://www.medrxiv.org/content/10.1101/2020.08.16.20175901v1> (reviewing over twenty studies finding a connection between air pollution and COVID outcomes).

⁸ *Id.* at 16.

⁹ See Aspen Environmental Group SB 350 Evaluation and Plan: Volume IX. Environmental Study, p. 100 (Table 4.4-3), CAISO (July 2016), available at <https://www.caiso.com/Documents/SB350Study-Volume9EnvironmentalStudy.pdf>.

start as it does in 38 hours of steady-state operation.¹⁰ This operation of gas power plants can significantly impact ambient air. For example, the California Energy Commission (“CEC”) found that emissions from the Pio Pico facility could *nearly double* the 1-hour concentration of nitrogen dioxide and impact nonattainment levels for particulate matter.¹¹

The impacts of fossil fuel power plants on air quality are especially likely to grow more acute in the future due to increased emissions from units more frequently starting, stopping and operating at partial load. As a report by Union of Concerned Scientists found: “many combined-cycle natural gas plants will start and stop much more frequently in 2030 compared with today,” and “[s]ome plants will go from close to zero starts today (i.e., non-stop generation) to starting once nearly every day of the year.”¹² Harmful criteria pollutants are also emitted from other electrical generation resources including combined heat and power (“CHP”) facilities, back-up diesel generators, biomass and biogas facilities. Emissions from these types of facilities could increase if LSEs procure them, as several propose to do in their IRPs. Problematically, and perhaps not surprisingly, several LSE IRPs project emission increases.¹³ These anticipated changes make consideration of air pollution, as the Commission and SB 350 require, essential for protecting communities already breathing unhealthy air.

B. Disadvantaged Communities and Air Quality Requirements

SB 350 and the Commission require *all* LSEs to meet several requirements to address DACs and AQ.¹⁴ These requirements include: the identification and demographics of the DACs the LSE serves; a description of activities and programs for DACs; detailed emission calculations associated with emitting resources used to serve load; an evaluation of ways to minimize emissions; a description of outreach to DACs; and a showing related to the availability of alternatives to natural gas contracts.

Initially, SB 350 requires LSE IRPs to “[m]inimize localized air pollutants and other greenhouse gas emissions, with early priority for” DACs.¹⁵ This plain language thus requires

¹⁰ *Id.*

¹¹ CEC, Final Pio Pico Decision, Publication #CEC-800-2012-003-CMF, p. 6-2-13 (Table 7).

¹² *Turning Down the Gas in California*, Union of Concerned Scientists, p. 6 (Figure 5) (Aug. 2018), available at <https://www.ucsusa.org/sites/default/files/attach/2018/07/Turning-Down-Natural-Gas-California-fact-sheet.pdf> (assumed a 42 MMT scenario, enforced LCR with four-hour batteries eligible).

¹³ See *supra* Table 1 (describing several LSEs that found emission increases).

¹⁴ See D.18-02-018, p. 66 (finding that “[t]here is no justification” for positions that the DAC requirements “should be voluntary or nonexistent for non-IOU LSEs.”); *id.* at 135, p. 166 (COL 15).

¹⁵ Cal. Pub. Util. Code § 454.52(a)(1)(I).

both an assurance that localized air pollution and greenhouse gas emissions from electrical generation will be minimized *and* an early priority for DACs. Importantly, this provision applies directly to emissions from and associated with the electric sector alone because IRPs require an analysis of emissions from electricity generators—not an analysis of emissions from entirely different sectors of the economy, such as transportation.¹⁶ This focus on electrical generation emissions is also consistent with the Commission’s requirements to calculate emissions from electrical generators to evaluate this requirement.¹⁷

Consistent with these requirements, D.18-02-018 requires development of evaluation criteria to ensure minimization of emissions, providing that:

LSEs also *must implement* evaluation criteria with respect to generation or storage resources located in disadvantaged communities. LSEs *must describe* their planned evaluating criteria, including any scoring bonuses or other approaches to ensure “early priority” as required by the statute. LSEs must then, at the time of procurement, demonstrate that they followed the identified criteria. In addition, LSE plans *must describe* policies and evaluation criteria to apply in planning and deciding when to retire, cancel, or not renew contracts for existing gas generation units that emit air pollutants that impact disadvantaged communities.¹⁸

Thus, LSEs must describe evaluation criteria, scoring bonuses and policies for ensuring early priority in detail in their IRPs.

The Commission further requires that LSEs describe outreach to DACs for development or re-contracting of resources for five-years or longer, providing that:

In addition, all LSEs who propose to conduct procurement activities either for the development of new resources or re-contracting of existing resources for a period of five years or longer (not including any tariffed or must-take resources required by separately-authorized Commission programs or decisions), must describe their planned activities to conduct outreach and seek input from any disadvantaged communities that could be impacted by the procurement. The LSEs must identify specific issues of impacts on disadvantaged communities and describe any environmental justice issues identified by residents and organizations within the disadvantaged communities. LSEs should make best efforts to conduct this type of outreach prior to the first IRPs to be filed later this year. In subsequent IRP rounds, we expect the LSEs to conduct such outreach prior to finalizing and submitting

¹⁶ See, e.g., *Id.* § 400(b) (describing how the CPUC and CEC shall consider technologies with the lowest feasible GHGs “criteria pollutants, and toxic air contaminants onsite”); *id.* § 454.52(a)(1)(A) (specifying that the GHG emissions reduction targets are for the electricity sector); *id.* § 454.52(b) (describing how the portfolio should consist of electricity-related and demand-side resources).

¹⁷ See, e.g., D.18-02-018, pp. 68-70; D.19-04-040, p. 15 (describing how LSEs need to provide estimates of all emitting sources).

¹⁸ D.18-02-018, pp. 69-70 (emphasis added).

their IRPs to the Commission and to summarize the feedback received from disadvantaged communities and their representatives in the IRP filings.¹⁹

This outreach applies to *all* resources; it is not limited to re-contracting for gas resources.

C. Analysis of LSE Compliance with DAC and Air Quality Requirements

In the analysis below, we present our assessment of the IRPs' compliance with the above requirements. This analysis focuses on IOUs, CCAs whose load is projected to be over 1,000 GWh in 2030, and two electric service providers ("ESPs") to illustrate the type of analysis conducted by ESPs. Because the majority of LSEs identified DACs, their DAC programs, and completed emissions calculations, this table focuses on the following requirements: (1) whether the LSE provides information about how it intends to minimize criteria air pollutants and other GHGs from emitting facilities; (2) whether the LSE prioritizes emission reductions for DACs; (3) whether LSEs described the evaluation criteria to ensure early priority for DACs in procurement; (4) whether the LSE described plans for outreach to DACs for long-term contracting; and (5) whether emissions increase from 2020 under either GHG portfolio.

Table 1: Summary of DAC/AQ Descriptions from LSE IRPs

<i>LSE</i>	<i>Is there a description of how the LSE will minimize AQ and GHG emissions?</i>	<i>Is there a description of how the LSE will prioritize emissions reductions for DACs?</i>	<i>Does the LSE include evaluation criteria for procurement to minimize emissions?</i>	<i>For long-term contracting, is outreach described?</i>	<i>Do emissions increase in 2030 from 2020 under either GHG portfolio?</i>
<i>PG&E Bundled</i>	PG&E eliminated contracts with coal and petroleum coke in 2015, does not currently intend to renew current CHP contracts when they expire, and retired an emitting facility in Oakland Clean Energy Initiative. ²⁰	Not specifically. PG&E broadly describes its approach to DACs and AQ and states that it contracted with three storage facilities in DACs, but it does not describe how it will prioritize emission	Not in the public materials.	Not specifically. PG&E describes its existing outreach activities, which are not specific to long-term contracting. ²²	2030 PM2.5 increases in both scenarios, with largest increase in 2026. SOx and NOx both increase in 2026 then fall by 2030 under both scenarios to levels below or

¹⁹ *Id.* at 69.

²⁰ PG&E IRP, pp. 40-41.

²² *Id.* at 38-40, 58.

		reductions for DACs. ²¹			equal to 2020 emissions. ²³
<i>SCE Bundled</i>	SCE examines and evaluates the locations of proposed new resources in the procurement process. ²⁴ It does not provide information about how to reduce emissions from emitting facilities in its territory.	It does not articulate a connection between emission reductions and DACs. Although two storage projects are in DACs, none of them are in DACs in SCE's territory.	SCE states it evaluates procurement in DACs through qualitative factors. ²⁵ It is unclear whether these factors have been used as the basis for picking a contract.	SCE states it will conduct outreach and seek input from DACs that could be impacted from procurement, but fails to provide any details about the outreach and whether it has conducted this in the past. ²⁶	No increase in any year under 38 MMT or 46MMT preferred plans. ²⁷
<i>SDG&E Bundled</i>	Cites existing programs and other sectors, but does not analyze how to reduce emissions from its facilities. ²⁸	Not clear. Summarizes programs and historical siting in DACs, but asserts that because existing plants in DACs are in local areas needed for RA or under long-term contracts, they will not retire. ²⁹	States it will seek bids for non-emitting sources and it is developing methods, but that it will be qualitative and rank projects of similar costs higher if they benefit DACs. ³⁰	SDG&E generally describes outreach and the process SDG&E would take, but states it has not done this because its portfolio does not call for near-term procurement or re-contracting. ³¹	Emissions decrease in both portfolios - SDG&E assumes retirement of all expiring contracts. ³²
<i>Clean Power Alliance</i>	CPA is focused on identifying opportunities to cite renewables to reduce usage of emitting facilities	Yes, CPA developed local programs for clean energy with community outreach, a power response program	Yes, CPA evaluates the impact to DACs in procurement., but it is not clear what the	Yes, CPA has developed its local programs and procurement with community outreach.	Unclear in narrative because only 2030 data presented. ³⁵

²¹ *Id.* at 40. PG&E states its plan will benefit DACs by not adding new gas (6, 37), but this does not reduce emissions from current levels.

²³ *Id.* at 34.

²⁴ SCE IRP, pp. 64, 65. SCE highlights its planned transportation electrification efforts (*see* p. 64), but as described above, SB 350 requires reductions from emitting electrical generation resources.

²⁵ *Id.* at 119-20.

²⁶ *Id.* at 120.

²⁷ *Id.* at 64 (Tables III-7, III-8).

²⁸ SDG&E IRP, pp. 24-28.

²⁹ *Id.* at 27. SDG&E does not consider operational measures to reduce emissions.

³⁰ *Id.* at 28, 39-40.

³¹ *Id.* at 37-39. SDG&E also does not state whether it conducted outreach for its current projects it intends to site in DACs.

³² *Id.* at 19, 9-10 (assumes retirements upon expiration other than 485 MW Desert Star.)

³⁵ *Id.* at 26.

	particularly in DACs. ³³	targeting DACs, and is examining how to reduce pollution burden in communities through procurement. ³⁴	evaluation entails.		
<i>San Diego Community Power</i>	Generally states it is minimizing emissions by procuring renewables and GHG-free resources.	Not clear. It states it is considering the impact of procurement on DACs, but provides no information about this consideration. ³⁶	This is not addressed in the narrative materials.	This is not addressed in the narrative materials.	Unclear because only presents 2030 data in the narrative. ³⁷
<i>EBCE</i>	EBCE is targeting specific resources locally to minimize emissions and looking to avoid potential pollution from biomass facilities. ³⁸	Sets targets for local resources to provide economic benefits and reduce service area GHG emissions to displace fossil fuel. ³⁹	Sets targets for local procurement, specifically with the goal of increasing deployment of clean energy in communities overburdened by pollution. ⁴⁰	Yes, EBCE plans to discuss its procurement strategy with its Community Advisory Committee, the public, and the Environmental Stakeholder community. ⁴¹	SO ₂ and NO _x increase in the 46 MMT portfolio, and SO ₂ increases in the 38 MMT portfolio while NO _x decreases. ⁴² PM _{2.5} emissions decrease under both portfolios. ⁴³
<i>Marin Clean Energy</i>	Generally states its dedication to reducing pollution and that they are trying to reduce reliance on	Developed several programs including ones to increase community resilience,	Has direct programs for vulnerable customers such as batteries and storage and	Has a Community Power Coalition that informs how to serve DACs. ⁴⁷ It is not clear whether this	Unclear because only include 2030 data in the narrative. ⁴⁸

³³ CPA IRP, pp. 26-27.

³⁴ *Id.* at 26-28.

³⁶ SDCP IRP, p. 23.

³⁷ *Id.* at 21,

³⁸ EBCE IRP, p. 20.

³⁹ *Id.* at 20-22.

⁴⁰ *Id.*

⁴¹ *Id.* at 16.

⁴² *Id.* at 18-19.

⁴³ *Id.*

⁴⁷ *Id.* at 29-30.

⁴⁸ *Id.* at 23, 26.

	unspecified power.. ⁴⁴	encourage workforce education and training. ⁴⁵	commits to consider the impacts of biogas on DACs. ⁴⁶	group is involved in procurement decisions.	
<i>San Jose Clean Energy</i>	Generally states that it prioritizes affordability and equitable access to essential service, and it is working to decrease reliance on system power. ⁴⁹	Creates programs benefiting local communities, evaluates impacts on DACs, and negotiated community investment funds as part of PPAs. ⁵⁰	Evaluates programs and their impact on DACs with equity metrics, but it is unclear how this applies to procurement.	Created a citizen advisory committee and a comprehensive community roadmap based on outreach. ⁵¹	Emissions decrease in both portfolios. ⁵²
<i>Monterey Bay Community Power (Central Coast Community Energy)</i>	Generally states its dedication to reducing pollution by limiting system power and limiting emissions by not including gas generator contracts. ⁵³	Developed several programs to improve resiliency and electrification. ⁵⁴	Mentions an early priority for reducing emissions, but it is not clear whether a preference for DACs is considered in procurement. ⁵⁵	Developed a community advisory council, but unclear if the outreach is related to procurement.	Increases of PM2.5, SO2, and NOx under both scenarios. ⁵⁶
<i>Silicon Valley Clean Energy</i>	Generally states its commitment to increasing investment in zero emissions resources. ⁵⁷	It does not propose to contract with biomass in DACs and is examining ways to reduce usage of gas generation near or in DACs. ⁵⁸ Also has targeted	Considers whether projects are located in DACs and provide benefits such as jobs to DACs. ⁶⁰	Offered grants to CBOs to increase outreach. SVCE is tracking equity within territory. ⁶¹	Emissions decrease aside from PM2.5 increases in the 46 MMT portfolio. ⁶²

⁴⁴ MCE IRP, pp. 23, 27, 29.

⁴⁵ *Id.* at 30-31.

⁴⁶ *Id.* at 23, 26, 30.

⁴⁹ SJCE IRP, pp. 30, 32.

⁵⁰ *Id.* at 31-32.

⁵¹ *Id.* at 22, 23, 31.

⁵² *Id.* at 30.

⁵³ MBCP IRP, p. 22, 28.

⁵⁴ *Id.* at 26-27.

⁵⁵ *Id.* at 26, 38.

⁵⁶ *Id.* at 24.

⁵⁷ SVCE IRP, p. 27.

⁵⁸ *Id.*

⁶⁰ *Id.* at 27.

⁶¹ *Id.* at 27-28.

⁶² *Id.* at 26.

		a resiliency solar + storage to multi-family units in low-income DACs or. ⁵⁹			
<i>Peninsula Clean Energy</i>	States its commitment to reducing reliance on system power and increasing investment in renewable and GHG-free resources.	Provides many programs targeting DAC and low-income communities including resiliency projects and solar & storage projects in addition to signing PPAs with renewables in DACs. ⁶³	Cited two solar projects in DACs. Requests and evaluates information related to location in, benefits for, and outreach to DACs in procurement. ⁶⁴	Offers Community Outreach Grants to work with community members. Requires contracts longer than five years be approved in public meeting. ⁶⁵	Emissions decreases in all portfolios. ⁶⁶
<i>CleanPowerSF</i>	States it reduces use of polluting plants by increasing reliance on renewable and GHG-free energy. ⁶⁷	Developing programs aimed at increasing renewables and energy efficiency in DACs and established a working group to develop more programs. ⁶⁸	Unclear.	Performing outreach to determine how to make renewables and DERs more assessable and in connection to long-term procurement. ⁶⁹	Increases in PM2.5 and NOx under both scenarios. SO2 remains the same in the accelerated case and rises slightly in the 46 MMT case. ⁷⁰
<i>Sonoma Clean Power</i>	States it has a portfolio that minimizes criteria air pollutants. ⁷¹	Plans to locate biomass away from DACs. ⁷²	Unclear.	Unclear for all long-term procurement, but it intends to seek	Increases in SO2, PM2.5, and NOx under both scenarios. ⁷⁴

⁵⁹ *Id.* at 28.

⁶³ PCE IRP, pp. 36-40.

⁶⁴ *Id.* at 63.

⁶⁵ *Id.* at 40, 63.

⁶⁶ *Id.* at 32-33.

⁶⁷ CleanPowerSF IRP, p. 40.

⁶⁸ *Id.* at 40-41.

⁶⁹ *Id.* at 41, 61.

⁷⁰ *Id.* at 34.

⁷¹ SCPA IRP, p. 20.

⁷² *Id.*

⁷⁴ *Id.* at 18.

				public input on biomass. ⁷³	
<i>Western Community Energy</i>	States that general improvements in AQ from the portfolio, even though air emissions increase. ⁷⁵	States that general AQ improvements should benefit DACs and that many renewable projects are located in DACs. ⁷⁶	Not described.	Not described.	Increases in SO ₂ , PM _{2.5} , and NO _x under both scenarios. ⁷⁷
<i>Pioneer Community Energy</i>	Generally states it minimizes emissions by relying on renewable generation and hydro.	States it considers the impacts of resource procurement on DACs and that it will prioritize siting biomass outside of DAC areas where feasible, but not clear how that is evaluated. ⁷⁸	States it will prioritize siting biomass outside of DACs where feasible, but not clear how that is evaluated. ⁷⁹	Pioneer has no DACs within its territory.	Unclear because only presents 2030 data in the narrative. ⁸⁰
<i>Shell Energy</i>	Generally states that it plans to minimize AQ by reducing its reliance on system power. ⁸¹	Does not have any current or planned activities to address DACs. ⁸²	States that if it is required to purchase energy from gas plant in DAC, will consider the impact on DAC and potential mitigation. ⁸³	Does not appear to conduct outreach.	Relevant emissions information is not in public materials.
<i>Constellation NewEnergy, Inc.</i>	Generally states it plans to minimize AQ by reducing its reliance on system power and	Does not appear to have any current or planned activities to address DACs.	Not clear.	Does not appear to conduct outreach.	Relevant emissions information is not in public materials.

⁷³ *Id.*

⁷⁵ WCP IRP, pp. 24-25.

⁷⁶ *Id.* at 25-26.

⁷⁷ *Id.* at 24.

⁷⁸ Pioneer IRP, p. 22.

⁷⁹ *Id.*

⁸⁰ *Id.* at 21-22.

⁸¹ Shell Energy IRP, p. 8.

⁸² *Id.* at 9.

⁸³ *Id.* at 9.

	prioritizing renewables. ⁸⁴				
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There are five key takeaways and recommendations for next steps from this review:

1. *Several LSEs Project Increases in Emissions. The LSEs Should Describe and Take Specific, Concrete Steps to Minimize Emissions Beyond Their General Portfolios.*

One of the more concerning takeaways from our review is that many LSEs do not conduct a specific analysis or propose proactive steps to minimize emissions in their portfolio. Rather, many LSEs rely on the general idea that increasing reliance on renewables should decrease emissions. This vague, general reliance is especially concerning when many LSEs project increased emissions between 2020 and 2030.⁸⁵ As we have explained above, emissions reductions cannot be taken for granted when renewable energy is added to the system because emissions directly depend on how the emitting facilities are run to integrate renewables and cycling emits more emissions than steady-state operation. Thus, it is inaccurate to assume emissions will decrease as renewable penetration goes up. LSEs need to be proactively considering how to minimize emissions from the emitting facilities.

It is also insufficient to suggest that reducing emissions in other sectors meets SB 350's requirement. SCE, for example, spends much of its discussion arguing that transportation reductions should count as minimizing emissions.⁸⁶ This argument, however, is off-base given that the IRP requirements focus on electric sector emissions, not the transportation sector,⁸⁷ and problematically, as transportation is electrified, emissions from electrical generation can increase if the electric sector does not reduce emissions.

Not every LSE was deficient in this regard. Several LSEs propose to reduce emissions by developing projects that directly target reductions in their communities or by working to reduce reliance on particular emitting facilities. For example, the Clean Power Alliance is actively identifying ways to reduce its reliance on gas generation by siting renewables in certain areas, and the East Bay Community Energy successfully sited local storage to facilitate the retirement of an emitting facility downtown Oakland. Other LSEs such as San Jose Clean Energy have created local programs to provide economic and environmental benefits with the input from the

⁸⁴ Constellation NewEnergy Inc. IRP, pp. 8-9.

⁸⁵ See *supra*, Table 1 (PG&E, MBCEP, SCPA, WCE, CleanPowerSF, and EBCE IRPs projected increases).

⁸⁶ SCE IRP, p. 65; see also PG&E IRP (similar arguments).

⁸⁷ See *supra*, p. 5 (citing authorities).

community as well as negotiated community investment funds. This type of specific, local evaluation is necessary to make informed decisions related to emission reductions.

LSE planning needs to go beyond calculating emissions to thoughtfully evaluating and considering how to reduce those emissions. We request that the Commission require the amendment of LSE plans that do not include specific evaluation of how to reduce emissions in their portfolios with a priority for DACs.⁸⁸

2. The LSEs Should Describe Steps to Minimize Other GHG Emissions, Such as Methane.

The LSE IRPs only focused on criteria air pollutants and CO₂, even though SB 350 requires an analysis of “other GHG emissions.”⁸⁹ Methane leakage from facilities can cause serious health impacts to neighboring communities and should be considered consistent with this requirement. Problematically, even though a facility in the LA area was recently found to be leaking significant methane to a neighboring community,⁹⁰ methane is not even mentioned in PG&E’s or SCE’s narrative, and SDG&E only mentions methane in the context of using RNG, not in reducing potential exposure through its generating plants.⁹¹ We request that any LSE with a long-term gas facility contract include information about the potential methane impacts to the immediate community, and steps that will be taken to minimize potential methane leakage.

3. The Majority of LSEs Do Not Provide Evaluation Criteria to Ensure Minimization of Emissions and Prioritization of DACs in Procurement.

The Commission requires LSE plans to: “describe their planned evaluating criteria, including any scoring bonuses or other approaches to ensure ‘early priority’ as required by the statute. LSEs must then, at the time of procurement, demonstrate that they followed the identified criteria.”⁹² Many LSEs failed to mention evaluation criteria at all, and the majority of those who did failed to describe how their approaches ensure early priority or how they have been previously applied in procurement.

Several CCAs and IOUs state that they plan to consider air quality and disadvantaged

⁸⁸ See *supra*, Table 1.

⁸⁹ Cal. Pub. Util. Code 454.52(a)(1)(I).

⁹⁰ *Statement Regarding Methane Detection at LADWP’s Valley Generating Station*, LADWP News (Aug. 26, 2020), <https://www.ladwpnews.com/statement-regarding-methane-detection-at-ladwps-valley-generating-station/>.

⁹¹ SDG&E IRP, p. 33.

⁹² D.18-02-018, pp. 69-70.

communities in procurement, but the majority of them do not specify how.⁹³ Those that provide more detail describe only a vague qualitative factor and fail to demonstrate that they followed the criteria in procurement decisions. For example, SCE's DAC and AQ evaluation criteria consist mostly of vague suggestions of "qualitative" factors that *may* influence resource decisions. It is unclear how this type of "qualitative" factor could "ensure early priority" or ever change a resource decision. As SCE admits: "It is difficult to know the impact of a portfolio selection on a DAC; however, having upfront flexibility in the procurement process allows SCE to consider DACs in the context of the full selection portfolio."⁹⁴ This flexibility, however, is not transparent to community members or to contractors hoping to develop resources in DACs. While we appreciate SCE considering DACs, without clear reportable metrics, it is unclear whether this qualitative factor will lead to decisions that will ensure early priority for reducing emissions in DACs. Especially problematic in SCE's calculus is that it appears to be based solely on location, not on whether the project provides economic or environmental benefits to DACs nor whether the project will minimize emissions.⁹⁵ The Commission's Decision and Section 399.13(a)(8) of the Public Utilities Code require more than a vague consideration lacking concrete requirements.⁹⁶ They require a real "preference" and to minimize air pollution.

To remedy this, we request that the Commission require LSEs to utilize reportable metrics in the form of a scoring bonus to ensure consideration of air quality and disadvantaged communities. Ideally, the LSE would use a Common Resource Valuation Methodology that would assess and quantitatively compare the energy and non-energy benefits and attributes of different resources including resources' impacts on air emissions and benefits to DACs.⁹⁷

Due to the lack of a CRVM method, we recommend that an interim quantitative metric be utilized to ensure that air quality and benefits to DACs are considered in procurement. We recommend considering the Integrated Distributed Energy Resources ("IDER") proceeding's air quality adder with an additional value for DACs along with explicit qualitative consideration of

⁹³ See *supra*, Table 1.

⁹⁴ SCE IRP, p. 119.

⁹⁵ *Id.* at p. 120 (describing that the RFO expressed a preference for preferred resources in DACs).

⁹⁶ D.18-02-018, p. 67; Cal. Pub. Util. Code § 399.13(a)(8).

⁹⁷ Though the Commission directed Staff to develop a CRVM method, there is not currently one available to use. See, e.g., D.18-02-018, p. 143 (the Commission directed staff to develop a CRVM method).

outreach and job benefits for disadvantaged communities.⁹⁸ To determine this interim adder, LSEs or the Commission could perform an analysis similar to what was conducted in the IDER proceeding and calculate the interim AQ adder for siting renewable energy and storage in DACs vs. the rest of the state given the disproportionate health and environmental burdens DACs face.

A quantifiable scoring bonus would ensure that DACs and AQ are considered in procurement, consistent with the Commission's decision. We request that LSE plans be amended to include this type of quantifiable consideration.

4. The Majority of LSEs Fail to Describe Outreach Related to Long-Term Contracts.

The Commission's decision requires: "In subsequent IRP rounds, we expect the LSEs to conduct such outreach prior to finalizing and submitting their IRPs to the Commission and to summarize the feedback received from disadvantaged communities and their representatives in the IRP filings."⁹⁹ Descriptions of this type of outreach and feedback has not been included by the majority of LSEs.¹⁰⁰ Many LSEs fail to even mention a plan to conduct outreach in advance of long-term contracting, while other LSEs only describe a general plan. This is insufficient and must be remedied. Communities should have a voice in the procurement impacting them.

Problematically, even though procurement has been happening, the IRPs suggest that outreach has not been conducted. For example, SCE states: "SCE *plans* to conduct outreach and seek input from DACs that could be impacted by its procurement activities."¹⁰¹ Planning to eventually conduct community outreach is not enough. Community outreach should be conducted whenever procurement activities are conducted.

As related to community outreach, a few CCAs have developed specific plans to engage local residents. For example, MCE had its Community Power Coalition participate in overall strategic decisions, PCE created community outreach grants to ensure community participation, and CPA conducted community outreach to inform its procurement plans. These concrete examples show steps other LSEs can take to develop outreach plans.

We request that the Commission require LSEs to amend their IRPs with detailed plans for community outreach to inform their long-term contract decisions. Although each LSE serves a

⁹⁸ See D.19-05-019, pp. 42-43 (calculating a \$6 /MWh interim air quality adder using US EPA's model COBRA); *see also* <https://www.epa.gov/statelocalenergy/co-benefits-risk-assessment-cobra-health-impacts-screening-and-mapping-tool> (describing COBRA).

⁹⁹ D.18-02-018, p. 69.

¹⁰⁰ *See supra*, Table 1.

¹⁰¹ SCE IRP, p. 120.

population with unique demographics, any community outreach should include some basic elements, such as: accessible materials available in the languages spoken in the community; effective outreach and targeting to ensure that communities are aware of the opportunity to provide feedback; meaningful and transparent opportunities to provide input; and consideration of community input in the decision-making process. We suggest that the Commission develop guidance and requirements to help ensure that LSEs meet basic parameters consistent with decisions in the Wildfire Mitigation Plan and Climate Adaptation proceedings.¹⁰²

5. The Commission Should Include Consideration of Community Resilience as a Separate Marker to Consider and Prioritize DACs.

Planning for community resilience is critical as communities increasingly face climate-related disasters and disruptions including wildfires, power shut-offs, and poor air quality. The negative impacts of our changing climate have and will hit disadvantaged and vulnerable communities first and the hardest. Hence, it is essential that LSEs consider and prioritize the needs of disadvantaged and vulnerable communities when planning for the future. Importantly, the Code requires resilience to be considered and included within IRPs, stating LSEs plans should: “[s]trengthen the diversity, sustainability, and resilience of the bulk transmission and distribution systems, and local communities.”¹⁰³ Several LSEs have developed programs to improve community resilience for the most vulnerable to disasters, like MCE’s and SVCE’s programs to install storage in vulnerable communities.¹⁰⁴ The Commission should require descriptions of these programs, and consider them as crucial ways to consider and prioritize DACs to mitigate the impacts of disasters and mitigate potential emissions impacts.

II. COMPLIANCE WITH GHG REQUIREMENTS

We have consistently advocated for a 30 MMT electric sector GHG target in 2030 because it provides the best path for meeting statutory requirements and ensuring the GHG reductions necessary to help prevent catastrophic climate change. We have voiced serious concerns that RESOLVE’s 46 MMT portfolio will not be within CARB’s Scoping Plan range.

Last IRP cycle, the Commission only aggregated one high GHG LSE aggregated plan. The Commission ultimately rejected this high GHG aggregated plan because it did not “ensure a

¹⁰² See generally D.20-03-004; D.20-08-046.

¹⁰³ Cal. Pub. Util. Code 454.52(a)(1)(G).

¹⁰⁴ See *supra*, Table 1 (summarizing plans).

sufficiently reliable or environmentally beneficial statewide electricity resource portfolio.”¹⁰⁵

Instead, the Commission was stuck choosing the only remaining portfolio it had analyzed: the prior RSP, and it was not able to take LSE preferences into account. To avoid repeating this mistake, we urge the Commission to focus its aggregation and evaluation on the 38 MMT plans. This is necessary for meeting GHG and AQ requirements and more consistent with LSE preferences, internal policies, and requirements, which are summarized in this Table:

Table 2: LSE’s Recommendations for GHG Target

<i>LSE</i>	<i>Procurement?</i>	<i>Recommendation for 38 MMT or 46 MMT?</i>
PG&E Bundled	Only 38 MMT plan.	No position, but notes that the RSP “does not effectively account for fossil plan retirements” and requests an examination of reliability and affordability before adopting a 38 MMT target. ¹⁰⁶
SCE Bundled	Yes	38 MMT, stating “SCE strongly urges the Commission to adopt a 38 MMT target for the PSPS and the 38 MMT conforming portfolios in LSEs’ IRPs to help put California on a viable trajectory towards meeting its decarbonization goals.” ¹⁰⁷
SDG&E Bundled	No	46 MMT, stating it prefers the 46 MMT portfolio. ¹⁰⁸
Clean Power Alliance	Yes	38 MMT, stating “the 38 MMT case is more reflective of the procurement objectives and preferences of CPA’s Board and local stakeholders. CPA is presenting the 38 MMT Conforming Portfolio as its preferred portfolio.” ¹⁰⁹
San Diego Community Power	Yes.	No position.
East Bay Community Energy	Yes.	38 MMT, stating “EBCE’s Board and Community Advisory Committee indicate a preference to pursue more aggressive GHG emissions reductions than are contemplated in the 46 MMT portfolio.” ¹¹⁰
Marin Clean Energy	Yes	38 MMT. “MCE asks that the Commission use its 38 MMT A-PCP in all statewide planning and portfolio consolidation, regardless of whether the Commission decides to use the 38 MMT or 46 MMT scenario as the basis for its Preferred System Portfolio.” ¹¹¹
San Jose Clean Energy	Yes.	38 MMT, explaining that “[t]he San Jose City Council approved SJCE’s recommendation that the Conforming 38 MMT Portfolio be SJCE’s preferred portfolio.” ¹¹²
Monterey Bay Community Power	Yes.	38 MMT, stating that the 46 MMT plan “does not reflect MBCP’s planned procurement.” ¹¹³
Silicon Valley Clean Energy	Yes.	38 MMT, stating that the 46 MMT “portfolio does not meet SVCE’s Board-approved procurement objective of being 100% carbon free on an

¹⁰⁵ D.19-04-040, p. 2.

¹⁰⁶ PG&E IRP, pp. 7, 91.

¹⁰⁷ SCE IRP, p. 2.

¹⁰⁸ SDG&E IRP, p. 1.

¹⁰⁹ CPA IRP, p. 4.

¹¹⁰ EBCE IRP, p. 16.

¹¹¹ MCE IRP, p. 4.

¹¹² SJCE IRP, p. 1.

¹¹³ MBCP IRP, p. 5.

		annual basis, so it is only being provided for IRP compliance purposes and does not reflect SVCE’s planned future procurement strategy.” ¹¹⁴
Peninsula Clean Energy	Yes.	38MMT, stating that the “38 MMT Conforming Portfolio B was developed to meet Peninsula Clean Energy’s internal renewable energy goals [and] not back-down any resources to increase the GHG emissions to meet the benchmark.” ¹¹⁵
CleanPowerSF	Yes.	38 MMT, stating that the 38 MMT Preferred Conforming Portfolio meets CleanPowerSF’s goals and allows it to meet its goals sooner at a lower cost, but the 46 MMT Portfolio does not meet “CleanPowerSF emissions goals.” ¹¹⁶
Sonoma Clean Power	Yes.	38 MMT, stating its Board approved its 38 MMT portfolio because it met “GHG and reliability objectives [and] all of SCPA’s internal goals.” ¹¹⁷
Western Community Energy	Yes.	No position.
Pioneer Community Energy	Yes.	No position.
Shell Energy	Yes	No position.
CNE	Yes	No position.

As shown above, the vast majority of LSEs studied either prefer the 38 MMT portfolio or have no preference. To be consistent with these LSEs and ensure GHG requirements are met, we urge the Commission to prioritize the development of the 38 MMT preferred system plan. We further request that the Commission include consideration of the social cost of carbon if it chooses to compare the 46 MMT to the 38 MMT plans. The Commission has previously adopted a three-element Societal Cost Test to be considered in this proceeding.¹¹⁸ Any comparison of different GHG targets should utilize this test consistent with the Commission’s previous direction. This consideration is also consistent with Section 701.1(c) of the Code, which directs the Commission to value costs and benefits to the environment when evaluating the cost effectiveness of energy resources.¹¹⁹ The Commission has a duty under SB 350 to “ensure” that the IRPs put California on a trajectory to meet its GHG requirements. The Commission can only meet this requirement by prioritizing the aggregation and consideration of the 38 MMT plans.

III. OTHER CONSIDERATIONS AND CONCERNS

A. Demand-side Resources Must Be Better Integrated into the IRP Process.

SB 350 requires IRPs to “enhance distribution systems and demand-side energy

¹¹⁴ SVCE IRP, p. 14.

¹¹⁵ PCE IRP, p. 10.

¹¹⁶ CleanPowerSF IRP, p. 56.

¹¹⁷ SCPA IRP, p. 3.

¹¹⁸ D.20-03-028, p. 90. *See also* D.19-05-019, p. 3.

¹¹⁹ Cal. Pub. Util. Code § 701.1(c).

management” as one of the goals of the process.¹²⁰ As this Commission correctly stated: “[a] defining feature of integrated resource planning is the fair and unbiased consideration of both demand and supply side resources as potential solutions for meeting system or societal needs. This feature is also a statutory requirement” for the IRP process.¹²¹

This requirement of integrating demand-side resources is largely not met by these IRPs. We are concerned about the lack of optimization and planning for demand-side resources, such as energy efficiency and demand response (“DR”), especially given CAISO’s recent analysis that suggests an increasing need to rely on DR.¹²² Some demand-side products are particularly well-suited to addressing the issues the LSEs will be confronting as they integrate increasing amounts of intermittent renewables into their portfolios and should be considered. Some LSEs have taken the type of steps necessary to start examining demand-side resources, such as SVCE, which completed an analysis of demand-side resources. SVCE noted that it could not include its analysis in its portfolio, which is a significant problem. If we do not start planning for demand-side resources, we will not meet SB 350’s goal of true integrated planning.

We have three requests to improve demand-side management (“DSM”) planning. First, we request that the Commission allow all LSEs to amend their IRPs to include better information about DR planning in relation to the CAISO’s call for more DR to meet extraordinary events. Second, we request that all LSEs incorporate DSM procurement into all of their open procurement solicitation. Third, we request that LSEs complete and publish an assessment of DSM opportunities based on a third party survey and evaluation of the utility’s DSM potential.

1. Concerns Related to Local Needs

The Commission plays a critical role in ensuring that all LSEs consider how RA—particularly local requirements—fits into any procurement resulting from this IRP process. In many cases, GHG-emitting resources that would otherwise face retirement stay online through lucrative local resource adequacy contracts due to local or subarea reliability needs. In some cases, these plants remain online through reliability-must-run designations that cover the plant’s entire cost of service, at great expense to ratepayers. SDG&E states, “[t]he IRP process should

¹²⁰ *Id.* § 454.52(a)(1)(H).

¹²¹ D.19-05-019, p. 32 (citing Pub. Util. Code §§ 454.51(a), 454.52(a)(1)(G), and 454.52(a)(2)(A)).

¹²² CAISO, *Preliminary Root Cause Analysis: Mid-August 2020 Heat Storm* (Oct. 6, 2020) at 2, available at <http://www.caiso.com/Documents/Preliminary-Root-Cause-Analysis-Rotating-Outages-August-2020.pdf>.

include an assessment similar to the CAISO's LCR process so that at least a regional assessment can be performed for each local area and reliability needs can be better identified as being driven by either system or local need.”¹²³ Under the 38 MMT plan, resources will start retiring in this next decade, but it does not appear the LSEs are planning for these retirements. To ensure an orderly transition away from gas while prioritizing air pollution reductions in DACs, local RA needs to be integrated alongside any new procurement resulting from IRP planning.

Some tangible steps are certainly within the LSEs' reach without further Commission guidance, such as considering local reliability needs so that any necessary procurement for preferred resources is sited in areas that will ensure adequate local capacity. This could be accomplished through an economic adder for preferred resources located in areas with local capacity or reliability constraints. Regardless, when aggregating the plans, the Commission will need to make assumptions and assess where procurement occurs. We request that this assessment prioritize procurement in DACs to facilitate the reduction of reliance on gas plants, consistent with our previous requests. Thoughtful consideration of the optimal location of resources is essential for minimizing air pollution and ratepayer costs. EBCE provides a great example of how a focus on local reliability can improve air quality: “EBCE sought and procured battery resources in downtown Oakland to provide local reliability and displace an aging fossil emitting generator and local RA from an in-country based utility scale wind farm.”¹²⁴

CONCLUSION

For these reasons, CEJA and Sierra Club ask that the Commission require LSEs to amend their plans to meet the AQ and DAC requirements and prioritize the evaluation of the 38 MMT plans.

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/s/ Deborah Behles

Deborah Behles

Email: deborah.behles@gmail.com

Of Counsel

California Environmental Justice Alliance

(415) 841-3304

Representing California Environmental

Justice Alliance (CEJA)

Respectfully Submitted,

/s/ Katherine Ramsey

Katherine Ramsey

Email: katherine.ramsey@sierraclub.org

Staff Attorney

Sierra Club

2101 Webster Street, Suite 1300

Oakland, CA 94612

(415) 977-5627

Representing Sierra Club

¹²³ SDG&E IRP, p. 51.

¹²⁴ EBCE IRP, p. 15.

Shana Lazerow
Email: slazerow@cbeocal.org
Legal Director
Communities for a Better Environment
120 Broadway, Suite 2
Richmond, CA 94804
(510) 302-0430
*Representing California Environmental
Justice Alliance (CEJA)*